

ABSTRACT OF DISCLOSURE

In a data demodulating method and apparatus, and a code arranging method, a multiplexer multiplexes an input data stream divided by a predetermined length into a plurality of types of pseudo random data streams using multiplexed information of predetermined bits by applying a predetermined multiplexing method to each of the pseudo random data streams. An encoder RLL-modulates the plurality of types of pseudo random data streams to create a modulated code stream including a minimum of DC components. The multiplexer generates the random data streams by inconsecutively scrambling the input data stream using the multiplexed information. The encoder weak DC-free RLL-modulates each of the multiplexed data streams without using a DC control sub code conversion table to which additional bits are added and provides a code stream including a minimum of DC components among multiplexed, RLL-modulated code streams.